

### Rail Strategy 1 – Baseline

Properties that would be used for terminal development include current railroad rights-of-way (including Junction, Livernois, Vernor, and the Advanced Departure Yards), the former West Detroit Yard, and certain properties adjacent to Vernor Yard. Collectively, this area is referred to as the Limited Terminal District (see Figure S-1 for existing rail property boundaries, i.e., the area in red). The total size of this area is approximately 500 acres.

Railroads which currently own or have access to property in the Limited Terminal District (LTD) will continue to use and develop their terminals. Railroads which currently do not own or have access to property in the Limited Terminal District may develop terminals on properties which become available within the LTD. Not all Detroit market intermodal traffic can be accommodated within the Limited Terminal District and other terminals will be required within the Greater Detroit Area, so additional property outside the LTD will be used to accommodate intermodal traffic.

Total intermodal traffic handled at terminals in the Greater Detroit Area will increase from today's levels; intermodal truck trips into and out of the Impact Study Area currently total about 2,000 per day. It is estimated that there are 6,000 trips of all types of commercial trucks into and out of the study area today. The expected volumes of truck traffic in 2025 are shown on Table S-1.

No federal funds will be used for terminal development. State funds may be used for terminal development within the Limited Terminal District. Private funds will be used for terminal development within the LTD. Total terminal development and operating costs in the Greater Detroit Area are expected to be greater with this Limited Terminal District development approach than with consolidation within a single terminal district, as proposed in Rail Strategy 3 discussed below.

Table S-1
Truck Traffic Forecasts (2025)

Gate	Average Daily Truck Movements		
	Rail Strategy 1	Rail Strategy 2	Rail Strategy 3
Α	1,870	2,499	216
В	611	817	887
С	1,690	2,260	2,455
D	2,562	3,425	3,721
E	588	786	854
F/G	NA	NA	2,477
Н	NA	NA	2,499
I	NA	NA	2,729
Total	7,321	9,787	15,838

Source: Arbor Vista Transportation

### Rail Strategy 2 – Limited Terminal District Development

This proposal is the same as the Baseline Rail Strategy in terms of using only existing railroad property. However, federal investment is expected, whereas none is anticipated in Rail Strategy 1. This will improve the operations and increase the capacity of the terminal. Rail activity will increase over the Baseline and so will truck traffic (Table S-1).

# Rail Strategy 3 — Terminal District Development on Existing Railroad and Additional Adjacent Property

This option calls for expanding the Terminal District from 500 acres. About 675 acres of additional land have been identified but no commitment to the exact amount to be acquired has been made (refer to Figure S-1 for definition of Terminal Study Area, i.e., the area in green). An estimated 800 to 850 acres will be needed to accommodate the intermodal terminal. More area may be needed depending on the buffer created between the DIFT and its surroundings and the placement of an internal circulation road. The expanded facility would be served by nine gates (A through I in Figure S-6). Daily truck traffic in 2025 is forecast to be almost 16,000 movements (ins/outs) (Table S-1) reflecting the larger terminal and its increased capacity.

## **Roadway Alternatives**

To initiate the definition of roadway alternatives, routes for trucks to each proposed gate from I-94/I-96 and I-75 are being studied, realizing the gate locations will be refined as the study proceeds. Those areas along these routes originally considered for improvement are:

- 1. Traveling to I-75
  - Michigan Avenue Interchange Ramp
  - Vernor Highway Underpass
  - New Truck-Only Road on Railroad Property
  - New Depressed Truck-Only Road between Livernois and Dragoon
  - Springwells/I-75 Ramps
- 2. Traveling to I-94
  - Rebuilt north half of I-94/Livernois Interchange
  - Wyoming Avenue Interchange Ramps
  - Central at Kronk and Rail Yard
  - Kronk from Livernois to Wyoming including a buffer
  - Stecker from Kronk to Michigan Avenue
- 3. Other
  - Lonyo at Rail Yard
  - Waterman Underpass of Rail Line

Three roadway proposals are highlighted here as they reflect changes based on public input.

New Truck-Only Road - Consistent with the objective of protecting the neighborhoods of Southwest Detroit/Dearborn and vicinity from DIFT truck traffic, the Illustrative Alternatives include the concept of a truck-only road to be constructed on existing railroad right-of-way. As originally conceived it could serve directly six of the nine gates (A, B, C, D, F and G). It would have its southern terminus at Springwells.

Based on public input, attempts were made to modify the truck-only road by shifting the south terminus from Springwells to Dearborn at

its interchange with I-75. However, this is not possible because there is not enough space to grade separate the rail lines, the interchange connections and the truck-only road.

The truck-only road has been changed at the north end. Surveys conducted in April 2001 at four intermodal centers in the study area indicate the expected distribution of DIFT trucks from Gates A and B will not need the truck-only road to extend from Livernois to these gates as the overwhelming (90%) movement will be to I-94/I-96. So, these pieces of the truck-only road are dropped.

Regardless of the modifications of the truck-only road, survey results also show that it will likely not be attractive to DIFT vehicles that are going north on I-75 (drivers won't go south only to double-back to go north). So, trucks departing Gates C, D, F and G will continue to use Livernois/Dragoon to travel to I-75 to go north.

Depressed Truck-Only Road - At the outset of this work it was believed the above-defined truck-only route over railroad property was a substitute proposal for a depressed DIFT truck road to be located between Dragoon and the alley to the west and extending from north of Vernor to I-75. Because the truck-only road on railroad property will not attract northbound I-75 vehicles, but the depressed road will, these two proposals are no longer considered mutually exclusive. The work summarized here indicates if they are both needed. If the depressed road is not called for, intermodal truck traffic leaving the terminal and headed north on I-75 will use Livernois and Dragoon.

Vernor Underpass - Mexicantown interests requested that access to Gate A be re-examined to determine if rebuilding the Vernor underpass of the railroad could be eliminated. The re-examination indicated that is it possible to travel between Gate A and I-75 south without needing to change the Vernor underpass. So, this proposal has been removed from the analysis.

Based on these refinements, the roadway alternatives can be defined as follows:

Baseline – The roadway network of existing and committed improvements as approved by SEMCOG represents the Baseline Alternative. It includes proposed improvements to I-94 and access to the Ambassador Bridge, which are being developed under separate and independent projects.

Alternative A – Adds the following proposals to the Baseline Alternative:

- 1. Traveling to I-75 and I-96
  - Michigan Avenue Interchange Ramp Improvements
- 2. Traveling to I-94
  - North Half of I-94/Livernois Interchange Rebuilding
  - Wyoming Avenue Interchange Ramps Modifications
  - Central Avenue Grade Separation at Rail Yard
  - Lonyo Avenue Grade Separation at Rail Yard
  - Kronk at Wyoming Intersection Reconfiguration
  - Waterman Avenue Underpass of Rail Line

Alternative B – Adds the truck-only road on railroad property to Alternative A improvements.

Alternative C – Adds the depressed truck road to Alternative A improvements.

Each of these alternatives is combined with Rail Strategy 3 to indicate the impacts.

# Rail Strategy 3 - Intermodal Terminal Characteristics

This phase os the DIFT project involves a rigorous feasibility test by combining the most aggressive rail strategy, i.e., No. 3, with the Illustrative Roadway Alternatives. Characteristics of Rail Strategy 3 are presented here.

Under the most aggressive rail strategy, the intermodal terminal will involve as much as 1,175 acres to include uses to accommodate the

rail/truck intermodal activity, buffers, roads, and the like. It would involve almost 16,000 daily intermodal truck movements in 2025.

Developing the intermodal terminal in that area is a straightforward engineering effort with few difficulties expected. The site is relatively flat, well drained, and already at the proper grade. Most of the space has been developed as railroad yard or for other transportation facilities. The task involves relocating rail lines, removing the existing "humps," and establishing the proper drainage, paving, and lighting. The structures that must be constructed are relatively simple office buildings and equipment maintenance facilities.

Under Rail Strategy 3, the number of truck movements in the study area (in and out) in a day in 2025 is forecast to be almost 16,000 (refer to Table S-1). Inside the terminal, 54 trains per day will move an average of 65 flatcars (89 feet each) carrying 100 trailer/containers. Half the trains will operate between 7:00 AM and 10:00 PM and the remainder the rest of the day.

Expansion of the intermodal terminal will be to the limits shown in green on Figure S-1, at the maximum. Because the area surrounding the Detroit-Livernois Yard has significant poverty, minority and Hispanic populations, environmental justice is an issue. To first address it, Gate F is consolidated with Gate G. Doing this avoids potentially displacing 120 dwelling units (56 single-family and 64 multi-family) and two businesses. However, this area north of the rail line from Martin to Junction including the St. Hedwig playfield is likely to be impacted by rail terminal noise (Figure S-7/S-7A). Mitigation of this condition is possible by constructing a noise wall along the north edge of the rail property.

Acquisition of the area defined by John Kronk, St. John's Avenue, Cabot and Trenton for terminal expansion would involve 81 dwelling units (63 single-family and 18 multi-family) (Figure S-8). This acquisition may be unavoidable, particularly if a buffer, including a relocated John Kronk Street, is to be built. And, the isolation of the enclave to be surrounded by intermodal activity, can be considered an impact of equal significance to its acquisition.